



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,999	07/25/2003	Lai Meng Cheng	MXIC-P910220	3721
7590 Kenton R. Mullins Stout, Uxa, Buyan & Mullins, LLP Suite 300 4 Venture Irvine, CA 92618			EXAMINER ALI, MOHAMMAD	
			ART UNIT 2166	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			03/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/626,999	CHENG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mohammad Ali	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-21 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/12/06 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-4, 5-21 and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Status process control (SPC) does not have support in the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-4, 5-21 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. "Status Process Cotrol (SPC) and determine whether the new control chart is a new trend chart" is indefinite.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-4, 5-21 and 23 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. There is no useful tangible results.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1-4, 5-21 and 23 rejected under 35 U.S.C. 102(e) as being anticipated by Shi et al. ('Shi' hereinafter), USP, 6,839,713.

With respect to claim 1,

Shi teaches a method for creating a new control chart using a computer, the Method (see col. 1, lines 31-32, Fig. 11) comprising:

providing a database including a plurality of status process control (SPC) control charts and a plurality of tables (see col. 12, lines 10-21, Fig. 9, Shi);

determining that information stored in at least one of the plurality of tables has changed;

determining whether the changed information is describable by at least one of the plurality of SPC control charts (see col. 16, lines 16-31, Shi);

updating the at least one of the plurality of SPC control charts with the changed information using the computer, upon a determination that the changed information is describable by at least one of the plurality of SPC control charts (see col. 4 lines 5-22, Fig. 8, Shi);

creating a new control chart that can describe the changed information using the computer, upon a determination that the changed information cannot be described by at least one of the plurality of SPC control charts (see col. 16, lines 16-31, Fig. 9, Shi); and

determining whether the new control chart is a new trend chart (see col. 17, lines 31-48, Fig. 17 et seq, Shi).

As to claim 2,

Shi teaches providing the database includes storing the plurality of SPC control charts and the plurality of tables in the database (see col. 16, lines 65-67, Fig. 17, Shi);

Art Unit: 2166

and the new control chart is created in a basic record system that includes a server coupled to the database (see col. 21, lines 55-67, Fig. 20, Shi).

As to claim 3,

Shi teaches wherein the SPC control charts include information relating to the detection of abnormal process trends from the statistical behavior (see col. 10, lines 1-11, Fig. 7, Shi).

As to claim 4,

Shi teaches the plurality of tables are selected from a group consisting of a primary route table, a sub route table, a tool table, a recipe table, a specification table, a measure field table, and a measure item table (see col. 7, lines 57 to col. 8, lines 15, Fig. 5A-B, Shi); and

the method further comprises verifying the format of the plurality of SPC control charts and the plurality of tables (see col. 12, lines 14-21, Fig. 9, Shi).

As to claim 6,

Shi teaches wherein the new trend chart is defined as a control chart that has not been previously used on tools of a type that is associated with the new control chart (see col. 12, lines 10-21, Fig. 9, Shi).

As to claim 7,

Shi teaches wherein if the new-chart, then the method further comprises calculating a plurality of control limit values for the new trend chart by using one or more predetermined functions to obtain optimized control limit values, when the new control chart is a new trend chart (see col. 14, lines 1-13, Fig. 13, Shi).

Art Unit: 2166

As to claim 8,

Shi teaches wherein the one or more predetermined functions are selected from a group consisting of mathematics expressions (see col. 14, lines 30-39 Shi).

As to claim 9,

Shi teaches determining whether the control limit values for the new control chart are the same as the control limit values of at least one of the plurality of SPC control charts, when the new control chart is not a new trend chart (see col. 14, lines 1-13, Fig. 13, Shi).

As to claim 10,

Shi teaches wherein each of the plurality of SPC control charts includes a plurality of control limit values (see col. 16, lines 17-31, Shi).

As to claim 11,

Shi teaches wherein using on-line values for the control limit values of the new control chart, when control limit values for the new control chart are the same as the control limit values of the at least one of the plurality of SPC control charts (see col. 16, lines 17-31, Shi).

As to claim 12,

Shi teaches wherein then the method further comprises sending a command to the server for determining whether to create the new control chart, and what control limit values to set when the control limit values are not the same (see col. 16, lines 17-31, Shi).

As to claim 13,

Art Unit: 2166

Shi teaches adding the new control chart and the plurality of control limit values to a negative list when the new control chart is not created (see col. 16, lines 17-31, Shi).

As to claim 14,

Shi teaches wherein the determining that information stored in at least one of the plurality of tables has changed is preceded by a step of determining when information stored in at least one of the plurality of tables has changed and by another step of, when the information has not changed, repeating the step of determining when information stored in at least one of the plurality of tables has changed (see col. 3, lines 26-35, Shi).

As to claim 15,

Shi teaches calculating a plurality of control limit values for the new control chart, when the new control chart is a new trend chart (see col. 16, lines 17-31, Shi);

determining whether the control limit values of the new control chart are the same as control limit values of at least one of the plurality of SPC control charts, when the new control chart is not a new trend chart (see col. 16, lines 17-31, Shi);

using on-line values for the control limit values of the new control chart when the control limit values are the same (see col. 4, lines 5-21, Shi); and

sending a command to the server for determining whether to create the new control chart, and what control limit values to set for the new control chart when the control limit values are not the same (see col. 3, lines 26-36, Shi).

As to claim 16,



Art Unit: 2166

Shi teaches verifying the format of the plurality of SPC control charts and file plurality of tables (see col. 16, lines 17-31, Shi).

As to claim 17,

Shi teaches wherein the new trend chart is defined as a control chart that has not been previously used on tools of a type that is associated with the new control chart (see col. 16, lines 17-31, Shi).

As to claim 18,

Shi teaches wherein the calculating of a plurality of control limit values uses one or more predetermined functions to obtain optimized control limit values (see col. 16, lines 17-31, Shi).

As to claim 19,

Shi teaches wherein the one or more predetermined functions are selected from a group consisting of mathematics expressions (see col. 14, lines 30-39, Shi).

As to claim 20,

Shi teaches adding the new control chart and the calculated plurality of control limit values to a negative list if when the new control chart is not created (see col. 16, lines 17-31, Shi).


Claims 21 and 23 have the same subject matter as of claims 1-4 and 5-20 above and essentially rejected for the same reasons as discussed above.

**Contact Information**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (571) 272-4105. The examiner can normally be reached on Monday-Thursday (7:30 am-6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Mohammad Ali  
Primary Examiner  
Art Unit 2166

MA  
March 16, 2007